

EPA Proposes Cleanup Plan for Polluted Industrial Site

Chemical Recovery Systems Inc.
Elyria, Ohio

July 2007

Public comment period

EPA will accept written comments on its proposed cleanup plan during a public comment period from July 16 to Aug. 14, 2007. This fact sheet provides a pre-addressed form for you to send to EPA, or you can fax, mail, or use a special EPA Web site (www.epa.gov/region5/publiccomment/crs-pubcomment.htm) to make comments. Comments must be postmarked no later than Aug. 14.

Public meeting

EPA will hold a public meeting to explain and answer questions about its proposed cleanup plan. We will also accept oral and written comments at the meeting.

Date: July 26, 2007

Time: 6 p.m.

Place: Elyria City Hall
City Council Chambers
2nd Floor
131 Court St.

If you need special accommodations to attend this meeting, please contact Susan Pastor at least one week prior to the meeting, toll-free at: 800-621-8431, Ext. 31325 weekdays, 10 a.m. - 5:30 p.m.

EPA Web site

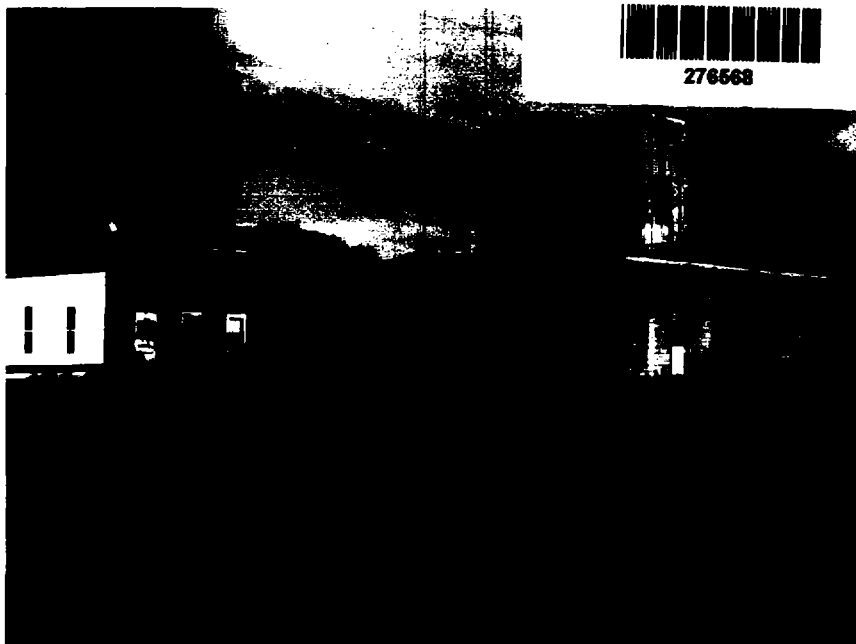
This fact sheet and other related documents can be found at:

www.epa.gov/region5/sites/crs

EPA Region 5 Records Ctr.



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The entrance to the former solvent reclamation facility at the Chemical Recovery Systems Inc. site.

To contain pollution on a former industrial location in Elyria, Ohio, U.S. Environmental Protection Agency is proposing to place a soil cover over the site and also dig up and dispose of the most contaminated debris lying in the northwest corner of the property. These actions should keep chemicals from moving into a nearby river and underground water supplies (called ground water in environmental terms). This proposal is one of seven alternatives considered for managing pollution at the Chemical Recovery Systems Inc. site and preventing humans and wildlife from coming into contact with hazardous chemicals. The seven alternatives are described in more detail later in this fact sheet.

EPA will pick one of the alternatives as the official cleanup plan after a public meeting and 30-day public comment period. The selected alternative will be published in a local newspaper notice and in an EPA document called the record of decision. These proposed cleanup measures¹ will be presented at a public meeting on Thursday, July 26, in Elyria, and people will have until Aug. 14 to submit written comments about the proposed plan (*see box, left*). EPA could alter the proposed cleanup plan further, pick another alternative or even develop a new plan based on public comments.

¹Section 117(a) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA known as the Superfund law) requires publication of a notice and a proposed plan for site cleanup. The proposed plan must also be made available to the public for comment. This fact sheet summarizes information in the remedial investigation, feasibility study, and technical proposed plan documents in the administrative record for the CRS site. Please consult these documents for more detailed information.

EPA examined the protectiveness, costs and effectiveness of each of the cleanup alternatives and decided its recommended option is a \$1.7 million plan that calls for covering 2 acres of the site with 2 feet of clean soil. Also, the most highly contaminated soil in the northwest corner will be excavated and backfilled with clean material plus 2 feet of clean soil so that contamination levels will no longer pose a health threat to people or wildlife. Two abandoned buildings on the site will also be torn down and the riverbank graded and covered with erosion control material under the proposed cleanup plan. Hazardous ground water will also be monitored, and legal controls will be placed on the site to prevent using the ground water until it is safe and to prohibit digging into the cover system without approval from EPA.

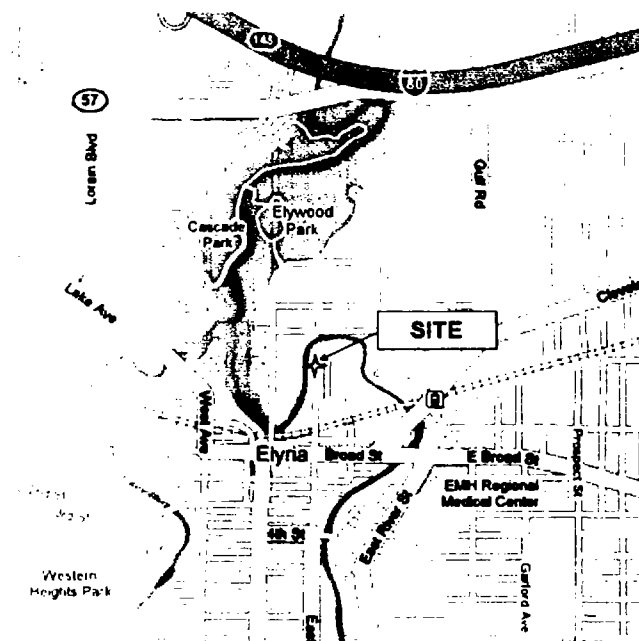
Health risks to people and the environment

Health risks from the CRS site if nothing is done are mainly to industrial employees who could work there in the future. These people have the potential of being exposed to the harmful chemicals in the soil by accidental swallowing, skin contact, and breathing hazardous gases released by the site (if a building was placed on top of the soil).

Scientists conducted an extensive study to find out what the health risks could be for people who are exposed to pollution on the CRS site. The study, called a health risk assessment, assumed the site will continue to be used for industrial and commercial purposes and not for homes that will draw their drinking water from private wells. The health study found that if the contamination is not contained, employees working on-site for many years at some future industrial facility would face a slightly higher-than-normal risk for getting cancer and non-cancer illnesses from the chemicals in the soil.

The most harmful chemicals include arsenic, benzene, tetrachloroethylene (known as PCE) and trichloroethylene (TCE). Scientists said people could be exposed to the pollution through incidental swallowing of dirt, skin contact, and inhaling soil gases that seep into buildings. The risk assessment found slightly lower cancer and non-cancer health risks for construction workers who may happen to work on the site temporarily. Those risks were still too high to be considered safe if nothing is done. The health study also considered whether children trespassing on the site would be in danger from the pollution but concluded their risks were low.

The health risk study found site contamination in the soil could also negatively affect animals. The river also had some contamination, but the levels were below state standards for fish that live around or in the mud (sediment)



A map of Elyria showing the location of the CRS site.

or surface water of the nearby East Branch of the Black River.

About Chemical Recovery Systems Inc.

The site covers about 2.5 acres on a peninsula in the East Branch of the Black River in an industrial-commercial area near the central business district of Elyria. Currently the site is owned by an Obitts family trust and is leased to M&M Aluminum Siding Co.

The only structures remaining at the location are a warehouse-office and the shell of a former still building. The site is fenced except for the portion facing the steep riverbank.

Russell Obitts operated two companies on the site from 1960 to 1974 that obtained used solvents from other businesses and then recycled them using a distilling process. The solvent reclamation operations continued under Chemical Recovery Systems Inc. from 1974 to 1981.

The location first came to the attention of Ohio EPA in 1978 when it appeared pollution from the site was affecting the East Branch of the Black River. In 1980 EPA became involved when it filed a lawsuit against CRS. In 1981, in response to the lawsuit, CRS stopped operations and removed tanks, drums and containers from the site. The company then filed for bankruptcy. Pollution studies were done throughout the 1980s and '90s. In 2003, a remedial investigation and feasibility study was done. The studies showed soil and ground water were contaminated

with a variety of chemicals and metals at levels considered unsafe if people or wildlife were exposed to them over many years.

Cleanup options

EPA set three cleanup goals for the CRS site:

- Reduce the health risk posed by direct contact with polluted soil and site debris;
- Reduce further pollution from contaminating surface and ground water; and
- Restore the ground water so it meets Safe Drinking Water Act standards.

The Agency looked at seven alternatives for meeting these goals. The alternatives were compared with the nine evaluation criteria set by federal regulation (*see box on Page 4*).

Several actions will take place under all the options under consideration: The two existing buildings on the site will be demolished and the concrete and brick crushed and used for fill. Metal, glass and asbestos-containing debris from the buildings will be separated and disposed of off-site. Wood chips and dead vegetation near the former storage tank area will also be disposed of off-site, and the entire location will be covered with 2 feet of clean soil, graded and seeded. The sloping riverbank of the Black River will also be graded and have erosion protection applied. A new fence will be placed around the site, and restrictions put in place to ensure future uses of the location remain commercial-industrial and not residential. A process called "natural attenuation" (by which a contaminant degrades over a period of time) will allow the chemicals in the ground water to degrade. The ground water will be monitored for 30 years to make sure the chemicals are degrading.

Here is a summary of the seven cleanup options:

Alternative 1 – No action: A no action alternative is always included in all EPA proposed cleanup plans as a comparison point for the other options. **Cost – \$0**

Alternative 2 – Soil cover with partial geo-synthetic membrane: This alternative consists of a 4-foot soil cover over 2 acres plus a "geo-synthetic membrane" (plastic liner) and soil combination covering the half-acre northwest corner of the site. **Cost – \$1.3 million**

Alternative 3 – Stone cover with partial geo-synthetic membrane: This alternative consists of a 1-foot-thick stone cover over 2 acres with fabric underneath and with a soil cover and liner laid over the remaining half acre. **Cost – \$1.3 million**

Alternative 4 – Asphalt cover with partial geo-synthetic membrane: Under this alternative, a cover consisting of 6 inches of gravel and 4 inches of asphalt along with geotextile fabric would cover the 2-acre parcel with the soil and liner laid over the remaining half acre.

Cost – \$1.4 million

Alternative 5 – Concrete cover with partial geo-synthetic membrane: This cover would consist of 6 inches of gravel and 4 inches of concrete over the 2-acre area with the soil cover and liner laid over the remaining half acre. **Cost – \$1.4 million**

Alternative 6 – Soil cover with excavation and disposal: (*This is EPA's recommended cleanup plan*) This alternative consists of a 2-foot-thick soil cover over the site to eliminate direct contact by people or wildlife with the hazardous chemicals in the soil. The most contaminated soil in the half-acre hot spot in the northwest portion of the site would also be excavated and disposed of off-site. **Cost – \$1.7 million.**

Alternative 7 – Excavation and disposal: Under this alternative, the entire 2.5 acres would be dug up and disposed of in an off-site waste disposal facility instead of containing and managing the chemical pollutants. The site would then be backfilled with clean material and seeded. **Cost – \$7.9 million** (for disposal at a municipal waste facility) **\$24 million** (if disposal is required at a hazardous waste facility)

Evaluation of Alternatives

EPA evaluated each cleanup alternative against the nine criteria required by the Superfund regulation (*see the comparison chart on Page 7*). The community acceptance criterion will be evaluated after public comments are received and the public meeting held.

All of the various kinds of covers proposed for the site would protect people and the environment. **Alternative 6, soil cover and excavation, was selected as the best, most cost-effective cleanup option.**

Alternatives 2-5 would protect the public and wildlife from direct contact with the site contaminants, but are not as effective as Alternative 6 in preventing further contamination to the ground water.

Every trace of pollution cannot be eliminated, but under Alternative 6, EPA would remove contaminated soil to a depth of 4 feet where the most highly contaminated soil is found in the northwest corner. After soil removal, samples would be collected and analyzed to determine the level of contamination remaining, if any, after excavation. The

excavation would also prevent rain and surface runoff from soaking through the soil and moving contamination down into the underground water.

The ground water would be monitored until the concentrations of all contaminants of concern reach safe drinking water standards.

Alternative 7, excavating and removing all the pollutants, would also be effective but would be much more expensive than the other options.

Next steps

EPA, in consultation with Ohio EPA, will evaluate public comments received during the comment period before choosing a final cleanup plan. EPA will respond to comments in a document called a "responsiveness summary." This document is attached to the record of decision, which will outline the final cleanup plan.

EPA will publish a notice in the local newspaper when the final cleanup plan is selected and send copies of the decision document to the locations on Page 7. It will also be posted on EPA's Web page. After a final cleanup plan is chosen, it will be designed and implemented.

For more information

For more information about the CRS site cleanup, please contact:

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Explanation of evaluation criteria

1. **Overall protection of human health and the environment** addresses how well an alternative protects people and the environment. This standard can be met by reducing or removing pollution or by reducing exposure to it.
2. **Compliance with applicable or relevant and appropriate requirements (ARARs)** ensures that alternatives comply with federal, state and local laws.
3. **Long-term effectiveness and permanence** evaluates how well an alternative will work over the long-term, including how safely remaining contamination can be managed.
4. **Reduction of toxicity, mobility or volume through treatment** addresses how well the alternative reduces the danger, movement and amount of pollution.
5. **Short-term effectiveness** compares how quickly an alternative can help the situation and how much risk there will be while it is under construction.
6. **Implementability** evaluates how feasible the alternative is and whether materials and services are available in the area.
7. **Cost** includes not only buildings, equipment, materials and labor but also the cost of maintaining the option for the life of the cleanup.
8. **State acceptance** asks if the state environmental agency (in this case, Ohio EPA) accepts the alternative.
9. **Community acceptance** judges how well the community accepts the alternative. EPA checks this after the comment period.

EPA is interested in your comments on the proposed cleanup plan for the Chemical Recovery Systems Inc. site. You may use the space below to write your comments. You may submit this at the July 26 public meeting, or detach, fold, stamp and mail to Susan Pastor. Comments must be postmarked by Aug. 14. If you have any questions, please contact Susan directly at 312-353-1325, or toll free at 800-621-8431, weekdays 10 a.m. - 5:30 p.m. Comments may also be faxed to Susan at 312-353-1155 or sent by the Internet at www.epa.gov/region5/publiccomment/crs-pubcomment.htm.

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Name _____

Affiliation _____

Address _____

City _____ State _____ ZIP _____



United States
Environmental Protection
Agency

Region 5
Office of Public Affairs (P-19J)
77 W. Jackson Blvd.
Chicago, IL 60604-3590

CHEMICAL RECOVERY SYSTEMS INC.: Proposed Cleanup Plan

**EPA Proposes Cleanup Plan for
Chemical Recovery Systems Inc. Site
Elyria, Ohio**

Community Meeting: Thursday, July 26, 2007

Public Comment Period: July 16 - Aug. 14

(details inside)

Comparison of Cleanup Alternatives							
Evaluation Criteria	Alternative						
	1	2	3	4	5	6	7
1. Overall protection of Human Health and the Environment	<input type="checkbox"/>	■	■	■	■	■	■
2. Compliance with ARARs	<input type="checkbox"/>	■	■	■	■	■	■
3. Long-Term Effectiveness and Permanence	<input type="checkbox"/>	■	■	■	■	■	■
4. Reduction of Toxicity, Mobility, and Volume Through Treatment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Short-Term Effectiveness	<input type="checkbox"/>	■**	■**	■**	■**	■**	■**
6. Implementability	<input type="checkbox"/>	■	■	■	■	■	■
7. Cost – Capital Construction Cost (including 30-yr. operation & maintenance period of approx. \$50,000 annually)	\$0	\$1.3 million	\$1.3 million	\$1.4 million	\$1.4 million	\$1.7 million	\$7.9-\$24 million*
8. State Acceptance	<input type="checkbox"/>	■	■	■	■	■	■
9. Community Acceptance	TBD	TBD	TBD	TBD	TBD	TBD	TBD
<input type="checkbox"/> Does not meet criteria <input checked="" type="checkbox"/> Partially meets criteria <input checked="" type="checkbox"/> Fully meets criteria TBD: To be determined after public comment period.							
**Dust produced during demolition, excavation and regrading of the CRS site is temporary with short-term exposure.							
*Smaller amount is for disposal at a municipal facility; larger amount is for disposal at a hazardous waste facility.							
A soil vapor extraction treatment system was also evaluated to treat the “hot spot” area located in the northwest corner. However, it was determined that SVE had a high potential for being inefficient and problematic.							

Site-related documents may be reviewed at:

Elyria Public Library
320 Washington Ave.

Ohio EPA Northeast District Office
2110 E. Aurora Road
Twinsburg, Ohio

EPA Region 5 Record Center
77 W. Jackson Blvd., 7th Floor
Chicago, Ill.

Certain information, including the record of decision, proposed plan and this fact sheet will be available electronically at: www.epa.gov/region5/sites/crs.

An administrative record, which contains detailed information upon which the selection of the cleanup plan will be based, is also located at the library and at EPA's Chicago office.

Chemical Recovery Systems Inc. Comment Sheet

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Place
First
Class
Postage
Here

Susan Pastor
EPA Community Involvement Coordinator
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